SAN MATEO COUNTY OFFICE OF EDUCATION

CLASS TITLE: INFORMATION TECHNOLOGY ANALYST

BASIC FUNCTION:

Under the direction of the Manager, Information Technology Support, perform a variety of technical duties involved in the programming, development, modification and analysis of assigned computer systems, databases, software and applications to meet the needs of County Office and client school district technology users, resolve data problems and provide for system enhancements; design, code, test and implement new system applications.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Perform a variety of technical duties involved in the programming, development, modification and analysis of assigned computer systems, databases, software and applications to meet technology user needs, resolve data problems and provide for system enhancements.

Analyze requests for application additions, solutions and revisions; confer with users to determine system and application needs, requirements, feasibility, operational problems and desired output; develop systems and applications in response to user feedback

Facilitate the collection, management, manipulation, reporting and distribution of computerized data used for analysis; verify integrity of data in new systems.

Provide technical support to County Office staff and technology users; respond to inquiries and provide training and information concerning the proper use and operation of computer systems and programs; assist staff with resolving system problems and provide data processing solutions.

Administer assigned databases to assure proper performance, operation and file sizing; monitor available system space; move and reformat files as necessary to provide for efficient program and system running; analyze and design interface between computer systems as needed.

Review, analyze and modify existing systems and programs as necessary; prioritize and respond to requests concerning existing computer systems and programs; evaluate computer system performance and utilization; modify programs and systems to enhance operations.

Design, code, write, develop and implement new system applications; revise programs as necessary to assure adaptation with existing computer systems; design, install, upgrade and configure software applications to enhance and assure smooth running of assigned computer systems.

Debug programs by preparing test data and testing program operations as assigned; run test data in actual

January 18, 2006 San Mateo County Office of Education

Information Technology Analyst - Continued

computer operations; detect and resolve programming errors and miscalculations; troubleshoot and resolve database, system and application errors and malfunctions as necessary.

Evaluate existing system designs to determine effectiveness and operational efficiency; modify systems to enhance system performance and presentation of data; integrate new software and revise programs as necessary to assure adaptation with existing computer systems.

Review and analyze computerized records and reports to assure accuracy and detect processing errors; modify systems and applications to resolve errors as needed; determine appropriate error corrections for software and correct existing data as necessary

Maintain various records related to computer programs and assigned activities; utilize assigned computer systems to initiate queries and generate computerized reports as requested.

Prepare and develop technical design specifications, program descriptions, procedural manuals and user documentation according to established procedures; evaluate new technologies for effectiveness in meeting the business requirements and objectives of users.

Communicate with technology users and various outside agencies to exchange information, coordinate activities and resolve issues or concerns.

Operate a variety of computers, servers, peripherals and specialized software.

Attend and participate in various in-services as assigned.

OTHER DUTIES: Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Principles, practices and techniques used in the development, maintenance and analysis of computer systems, databases and applications.

Computer programming systems, utilities and applications used by the County Office.

Applicable programming languages.

Principles, methods and procedures of operating computers and peripheral equipment.

System utilities and design and program applications.

Computerized data collection, management, manipulation and distribution requirements for analysis and reporting functions.

Principles, practices and methods of database structures, computer programming and system design.

Database structures, on-line applications and system capabilities of County Office computer systems.

Techniques of testing and debugging computer programs.

Record-keeping and system documentation techniques.

January 18, 2006 San Mateo County Office of Education

Information Technology Analyst - Continued

Interpersonal skills using tact, patience and courtesy. Oral and written communication skills.

Information Technology Analyst - Continued

ABILITY TO:

Perform a variety of technical duties involved in the programming, development, modification and analysis of assigned computer systems, databases, software and applications to meet County Office needs, resolve data problems and provide for system enhancements.

Design, code, test and implement new system applications.

Review, analyze and modify existing systems and programs as necessary.

Facilitate the collection, management, manipulation, reporting and distribution of computerized data used for analysis.

Design programming solutions for application problems and malfunctions.

Maintain assigned databases to assure proper performance, operation and file-sizing.

Integrate new applications and revise programs to assure adaptation with existing computer systems.

Analyze requests for system additions and revisions.

Operate computers and peripheral equipment properly and efficiently.

Meet schedules and time lines.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others.

Maintain various records related to work performed.

Analyze situations accurately and adopt an effective course of action.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and two years experience involving the programming and development of computer systems, databases and applications.

WORKING CONDITIONS:

ENVIRONMENT: Office environment.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard. Hearing and speaking to exchange information. Seeing to read a variety of materials and view a computer monitor. Sitting for extended periods of time.